

**AMENDMENTS TO THE CLAIMS**

**The claims in this listing will replace all prior versions, and listings, of claims in the application.**

1-6. (Canceled)

7. (Currently Amended) A correlation system comprising:

a frequency adding means for receiving a reference signal  $R_0(t)$  and adding thereto a predetermined plurality  $n$  of frequency components ( $F_1$ - $F_n$ ) to output a resultant reference signal  $R_1(t)$ - $R_n(t)$ , wherein  $n$  and  $t$  are integers;

an adder for receiving  $n$  reference signals  $R_1(t)$ - $R_n(t)$  and a single said reference signal  $R_0(t)$  as a base and adding them together to output a corrected reference signal  $R(t)$ ; and

a correlator for taking a correlation between a measurement signal  $S(t)$  and said corrected reference signal  $R(t)$  to output a correlation output signal.

8. (Original) A correlation system according to claim 7, wherein the frequency adding means multiplies the reference signal  $R_0(t)$  by  $e^{-j\omega t}$ .

9. (Original) A correlation system according to claim 7, wherein the frequency adding means outputs an exclusive logical sum (EXOR) between digital clocks of frequencies corresponding to the frequency components ( $F_1$ - $F_n$ ) and the reference signal  $R_0(t)$ .

10. (Canceled)

11. (Currently Amended) A correlation system according to claim 7, wherein the measurement signal  $S(t)$  is a reception signal of a spread ~~signal~~ spectrum spread signal.

12. (Canceled)

13. (Original) A correlation system according to claim 7, wherein the measurement signal  $S(t)$  is a spectrum spread signal of a W-CDMA system.

14. (Canceled)

15. (Currently Amended) A correlation method comprising:

a frequency adding step for receiving a reference signal  $R0(t)$  and adding thereto a predetermined plurality  $n$  of frequency components ( $F1-Fn$ ) to output a resultant reference signal  $R1(t)-Rn(t)$ , wherein  $n$  and  $t$  are integers;

an adding step for receiving  $n$  reference signals  $R1(t)-Rn(t)$  and a single said reference signal  $R0(t)$  as a base and adding them together to output a corrected reference signal  $R(t)$ ; and

a correlating step for taking a correlation between a measurement signal  $S(t)$  and said corrected reference signal  $R(t)$  to output a correlation output signal.

16. (Canceled)

17. (Currently Amended) A computer-readable medium embodying a program of instructions for execution by the computer to perform a correlation method comprising:

a frequency adding step for receiving a reference signal  $R0(t)$  and adding thereto a predetermined plurality  $n$  of frequency components ( $F1-Fn$ ) to output a resultant reference signal  $R1(t)-Rn(t)$ , wherein  $n$  and  $t$  are integers;

an adding step for receiving  $n$  reference signals  $R1(t)-Rn(t)$  and a single said reference signal  $R0(t)$  as a base and adding them together to output a corrected reference signal  $R(t)$ ; and

a correlating step for taking a correlation between a measurement signal  $S(t)$  and said corrected reference signal  $R(t)$  to output a correlation output signal.

18-19.(Canceled)

20. (Currently Amended) A correlation system comprising:

a frequency adding device that receives a reference signal  $R0(t)$  and adds thereto a predetermined plurality  $n$  of frequency components ( $F1-Fn$ ) to output a resultant reference signal

$R_1(t)-R_n(t)$ , wherein  $n$  and  $t$  are integers;

an adder that receives  $n$  reference signals  $R_1(t)-R_n(t)$  and a single said reference signal  $R_0(t)$  as a base and adds them together to output a corrected reference signal  $R(t)$ ; and

a correlator that takes a correlation between a measurement signal  $S(t)$  and said corrected reference signal  $R(t)$  to output a correlation output signal.

21. (Canceled)